

AMENDMENTS TO THE CLAIMS

1-16. (Canceled)

17. (Currently Amended) An error correction method using a plurality of pieces of sub data which comprise error correction codes that are independent from error correction codes of an error correction target code line to configure erasure position information, said method comprising:

~~a judgment step of~~ judging whether or not a first piece of data, which is one of a plurality of pieces of data of the error correction target code line, and a second piece of data, which is one of a plurality of pieces of data of a previous error correction code line, were located between the same pieces of sub data before being deinterleaved;

~~a configuration step of~~ configuring erasure position information of said first piece of data belonging to the error correction target code line to be ~~the same as~~ identical to erasure position information of said second piece of data belonging to the previous error correction code line when said ~~judgment step~~ judging judges that the first piece of data and the second piece of data are both located between the same pieces of sub data; and

~~an error correction step of~~ performing error correction on the error correction target code line.

18. (Previously Presented) An error correction method as defined in Claim 17, wherein said error correction target code line extends between plural pieces of sub data before being deinterleaved.

19. (Currently Amended) An error correction method as defined in Claim 17, wherein sync data is ~~inserted~~ located between data at predetermined intervals to configure the erasure position information of said first piece of data.

20. (Currently Amended) An error correction method as defined in Claim 19, wherein said ~~judgment step~~ judging judges that the first piece of data and the second piece of data do not exist between the same pieces of sub data when said first piece of data is directly subsequent to a piece of sub data or a piece of sync data in a data recording order.

21. (Currently Amended) An error correction method as defined in Claim 20, wherein said ~~error correcting step~~ performing error correction performs error correction without using said erasure position information when an amount of said erasure position information configured in said configuring of erasure position information ~~step~~ is higher than an amount of parity data.

22. (Currently Amended) An error correction method using a plurality of pieces of sub data which comprise error correction codes that are independent from error correction codes of an error correction target code line to configure erasure position information, said method comprising:

~~a judgment step of judging~~ whether or not a first piece of data, which is one of a plurality of pieces of data of the error correction target code line, and a second piece of data, which is one of a plurality of pieces of data a previous error correction code line, were located between the

same pieces of sub data before being deinterleaved when the previous error correction code line had error correction performed thereon by using said erasure position information;

~~a configuration step of~~ configuring erasure position information of said first piece of data belonging to the error correction target code line to be ~~the same as~~ identical to erasure position information of said second piece of data belonging to the previous error correction code line when said ~~judgment step~~ judging judges that the first piece of data and the second piece of data are both located between the same pieces of sub data, and configuring erasure position information of every piece of data of the error correction target code line when the previous error correction code line had error correction performed thereon without using erasure position information; and

~~an error correction step of~~ performing error correction on the error correction target code line.

23. (Previously Presented) An error correction method as defined in Claim 22, wherein said error correction target code line extends between plural pieces of sub data before being deinterleaved.

24. (Currently Amended) An error correction method as defined in Claim 22, wherein sync data is ~~inserted~~ located between data at predetermined intervals to configure the erasure position information of said first piece of data.

25. (Currently Amended) An error correction method as defined in Claim 24, wherein

said ~~judgment step~~ judging judges that the first piece of data and the second piece of data do not exist between the same pieces of sub data when said first piece of data is directly subsequent to a piece of sub data or a piece of sync data in a data recording order.

26. (Currently Amended) An error correction method as defined in Claim 25, wherein said ~~error correction step~~ performing error correction performs error correction without using said erasure position information when an amount of said erasure position information configured in said ~~configuration step~~ configuring of erasure position information is higher than an amount of parity data.

27. (Currently Amended) An error correction apparatus using a plurality of pieces of sub data which comprise error correction codes that are independent from error correction codes of an error correction target code line to configure erasure position information, said apparatus comprising:

a judgment means for judging whether or not a first piece of data, which is one of a plurality of pieces of data of the error correction target code line, and a second piece of data, which is one of a plurality of pieces of data of a previous error correction code line, were located between the same pieces of sub data before being deinterleaved;

a configuration means for configuring erasure position information of said first piece of data belonging to the error correction target code line to be ~~the same as~~ identical to erasure position information of said second piece of data belonging to the previous error correction code line when said judgement means judges that the first piece of data and the second data piece of

data are both located between the same pieces of sub data; and

an error correction means for performing error correction on the error correction target code line.

28. (Previously Presented) An error correction apparatus as defined in Claim 27, wherein said error correction target code line extends between plural pieces of sub data before being deinterleaved.

29. (Currently Amended) An error correction apparatus as defined in Claim 27, wherein sync data is ~~inserted~~ located between data at predetermined intervals to configure erasure position information of said first piece of data.

30. (Previously Presented) An error correction apparatus as defined in Claim 29, wherein said judgment means judges that said first piece of data and said second piece of data do not exist between the same pieces of sub data when said first piece of data is directly subsequent to a piece of sub data or a piece of sync data in a data recording order.

31. (Previously Presented) An error correction apparatus as defined in Claim 30, wherein said error correction means performs error correction without using said erasure position information when an amount of said erasure position information configured by said configuration means is higher than an amount of parity data.

32. (Currently Amended) An error correction apparatus using a plurality of pieces of sub data which comprise error correction codes that are independent from error correction codes of an error correction target code line to configure erasure position information, said apparatus comprising:

a judgment means for judging whether or not a first piece of data, which is one of a plurality of pieces of data of the error correction target code line, and a second piece of data, which is one of a plurality of pieces of data of a previous error correction code line, were located between the same pieces of sub data before being deinterleaved when the previous error correction code line had error correction performed thereon by using said erasure position information;

a configuration means for configuring erasure position information of said first piece of data belonging to the error correction target code line to be ~~the same as~~ identical to erasure position information of said second piece of data belonging to the previous error correction code line when said judgment means judges that the first piece of data and the second piece of data are both located between the same pieces of sub data, and configuring erasure position information of every piece of data of the error correction target code line when the previous error correction code line had error correction performed thereon without using erasure position information; and

an error correction means for performing error correction on the error correction target code line.

33. (Previously Presented) An error correction apparatus as defined in Claim 32, wherein said error correction target code line extends between plural pieces of sub data before

being deinterleaved.

34. (Currently Amended) An error correction apparatus as defined in Claim 32, wherein sync data is ~~inserted~~ located between data at predetermined intervals to configure erasure position information of said first piece of data.

35. (Previously Presented) An error correction apparatus as defined in Claim 34, wherein said judgment means judges that said first piece of data and said second piece of data do not exist between the same pieces of sub data when said first piece of data is directly subsequent to a piece of sub data or a piece of sync data in a data recording order.

36. (Previously Presented) An error correction apparatus as defined in Claim 35, wherein said error correction means performs error correction without using said erasure position information when an amount of said erasure position information configured by said configuration means is higher than an amount of parity data.

37. (Currently Amended) An error correction method as defined in Claim 18, wherein sync data is ~~inserted~~ located between data at predetermined intervals to configure the erasure position information of said first piece of data.

38. (Currently Amended) An error correction method as defined in Claim 23, wherein sync data is ~~inserted~~ located between data at predetermined intervals to configure the erasure

position information of said first piece of data.

39. (Currently Amended) An error correction apparatus as defined in Claim 28, wherein sync data is ~~inserted~~ located between data at predetermined intervals to configure erasure position information of said first piece of data.

40. (Currently Amended) An error correction apparatus as defined in Claim 33, wherein sync data is ~~inserted~~ located between data at predetermined intervals to configure erasure position information of said first piece of data.